
ON THE ISOLATION AND IDENTIFICATION OF SOIL MICROORGANISMS

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ABSTRACT

In the course of a study of the relationship between soil microorganisms and crop response, fifty different soil organisms were isolated from test plots which were being treated with various organic materials. Six different families were represented in the thirty-four organisms classified into Class *Schizomycetes*, Order I *Eubacterales*, and two different families were represented in the sixteen organisms classified into Order II *Actinomycetales*. Since Bergey's Manual does not contain a complete description of many of the species, only eleven of these organisms were identified to species; the remainder being identified to genus. One organism in the genus *Nocardia* exhibited strong antagonistic action against gram positive test organisms. Further investigations are being carried out to isolate and identify the antagonistic substance.

The following is a list of the organisms isolated:

<i>Achromobacter delmarvae</i>	<i>Micrococcus varians</i>
<i>Achromobacter</i> (6 species)	<i>Micrococcus</i> (6 species)
<i>Alcaligenes faecalis</i>	<i>Nocardia minima</i>
<i>Bacillus</i> (1 species)	<i>Nocardia</i> (5 species)
<i>Bacterium</i> (3 species)	<i>Pseudomonas incognita</i>
<i>Corynebacterium tumescens</i>	<i>Pseudomonas rugosa</i>
<i>Corynebacterium</i> (3 species)	<i>Sarcina flava</i>
<i>Flavobacterium diffusum</i>	<i>Streptomyces fradiae</i>
<i>Flavobacterium</i> (6 species)	<i>Streptomyces viridochromagenes</i>
<i>Micrococcus flavens</i>	<i>Streptomyces</i> (8 species)
